



JC REC'D PCT/PTO 1 1 JUN 2001

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Gerhard HARTWICH and Adam HELLER  
Serial no. : 09/856,543  
Filed : an effective filing date of November 19, 1999  
For : METHOD FOR THE ELECTROCHEMICAL  
DETECTION OF NUCLEIC ACID OLIGOMER  
HYBRIDS  
Docket : PATKRI P01AUS

The Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**ADDENDUM TO INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Further to the Information Disclosure Statement mailed under May 22, 2001 an Express Mailing date, the following are comments concerning the concise explanation of the foreign language documents, found either the specification of the present application or on the previously submitted European Search Report.

EP 831 327 - This reference discloses the use of redox-active molecules in methods to determine the presence of the target molecules. Electrochemical methods are mentioned (page 7, line 34 to 36), however, no modified DNA is disclosed.

DE 42 16 696 - This reference describes assays with improved sensitivity, e.g. assays based on interactions between DNA strands having complementary base sequences (claim 1). The method according to DE 42 16 696 uses modified substances like DNA modified with redox-active moieties or fluorescent molecules (claim 4). However, no specific examples of modified DNA are mentioned.

Homlin et al. "Ladungsübertragung durch den DNA-Basenstapel" - This document discloses modification of DNA with electron donors and electron acceptors. The DNA acts as a mediator for the electron transfer (page 2831, abstract). Chapter 5 (page 2844) provides an overview on modified DNA. Non-covalent bound electron donors and electron acceptors such as metal intercalators are mentioned. Ethidium is suggested as an example for a photo induced donor, DAP as an example for an electron acceptor, and Ru- and Rh-complexes as well as metalloporphyrines as examples for electron donors (page 2845, left column). However, none of the redox-active substances, as recited in new claim 29, are mentioned.

Diederichsen "Ladungstransport in DNA" - The author of this reference describes DNA modified by attachment of electron donors and electron acceptors. A number of Ru- and Rh- complexes are mentioned as examples for such electron donors and electron

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acceptors. However, none of the redox-active substances, as recited in new claim 29, are mentioned.

Please note that WO 00/31101 was mistakenly cited as prior art for this case when, in fact, it is not prior art—it actually corresponds to the above identified application.

This submission is believed to complete the filing of the above referenced Information Disclosure Statement. If any further action on the part of the Applicant is necessary to make this art properly of record, the Examiner is respectfully requested to contact the undersigned.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,

  
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**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service, with sufficient postage, as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on June 7, 2001.

By: Michael J. Bujold  
Print Name: Michael J. Bujold